

CLAIMS

What is claimed is:

1. A computerized method of encoding multimedia content descriptions for a specific application domain comprising:
 - obtaining an instance document that encodes the descriptions of multimedia content for a general application domain; and
 - transforming the instance document from the general application domain to the specific application domain by mapping from a general application namespace to a specific application namespace.
2. The computerized method of claim 1 further comprising:
 - creating a binary instance document from the transformed instance document.
3. The computerized method of claim 2 further comprising:
 - deriving a frequency table from the specific application namespace; and
 - using the frequency table to encode the binary instance document.
4. The computerized method of claim 1, wherein the specific application namespace includes elements in the general application namespace.
5. The computerized method of claim 1, wherein the general application namespace is defined by a data description language specified by MPEG-7.

6. The computerized method of claim 1, wherein the specific application namespace is defined by an application specific description language.

7. The computerized method of claim 1, wherein the mapping is defined in an extensible markup language stylesheet translation document.

8. A computer-readable medium having executable instructions to cause a computer to perform operations comprising:

obtaining an instance document that encodes descriptions of multimedia content for a general application domain; and

transforming the instance document from the general application domain to a specific application domain by mapping from a general application namespace to a specific application namespace.

9. The computer-readable medium of claim 8, wherein the operations further comprise:

creating a binary instance document from the transformed instance document.

10. The computer-readable medium of claim 9, wherein the operations further comprise:

deriving a frequency table from the specific application namespace; and

using the frequency table to encode the binary instance document.

11. A system to encode descriptions of multimedia content for a specific application domain comprising:

a processor coupled to a memory through a bus; and

an encoding process executed by the processor from the memory to cause the processor to obtain an instance document that encodes the descriptions of multimedia content for a general application domain, and to transform the instance document from the general application domain to the specific application domain by mapping from a general application namespace to a specific application namespace.

12. The system of claim 11, wherein the encoding process further causes the processor to create a binary instance document from the transformed instance document.

13. The system of claim 12, wherein the encoding process further causes the processor to derive a frequency table from the specific application namespace and to use the frequency table to encode the binary instance document.

14. A computerized method of presenting multimedia content descriptions on a client in a specific application domain, the method comprising:

transforming, by a server, an instance document from a general application domain to the specific application domain, wherein the instance document encodes the descriptions of multimedia content in the general application domain;

creating, by the server, a binary instance document from the transformed instance document; and

transmitting, by the server, the binary instance document to the client upon request from the client.

15. The computerized method of claim 14 further comprising:
receiving, by the client, the binary instance document from the server; and
recreating, by the client, the transformed instance document from the binary instance document.
16. The computerized method of claim 14, wherein transforming the instance document comprises:
mapping from a general application namespace to a specific application namespace.
17. The computerized method of claim 16 further comprising:
deriving, by the server, a frequency table from the specific application namespace;
and
using, by the server, the frequency table to encode the binary instance document.
18. A computer-readable medium having executable instructions to cause a computer to perform operations comprising:
transforming an instance document from a general application domain to a specific application domain, the instance document encoding the descriptions of multimedia content in the general application domain;
creating a binary instance document from the transformed instance document; and
transmitting the binary instance document to a client upon request from the client.

19. The computer-readable medium of claim 18, wherein transforming the instance document comprises:

mapping from a general application namespace to a specific application namespace.

20. The computer-readable medium of claim 19, wherein the operations further comprise:

deriving a frequency table from the specific application namespace; and
using the frequency table to encode the binary instance document.

21. The computer-readable medium of claim 18, wherein the operations further comprise:

receiving the binary instance document; and
recreating the transformed instance document from the binary instance document.

22. A system to present multimedia content on a client in a specific application domain comprising:

a processor coupled to a memory through a bus; and
a server process executed from the memory by the processor to cause the processor to transform an instance document encoding descriptions of multimedia content in a general application domain from the general application domain to the specific application domain, to create a binary instance document from the transformed instance document, and to transmit the binary instance document to a client upon request from the client.

23. The system of claim 22, wherein the server process further causes the processor to map from a general application namespace to a specific application namespace to transform the instance document.

24. The system of claim 23, wherein the server process further causes the processor to derive a frequency table from the specific application namespace and to use the frequency table to encode the binary instance document.

25. The system of claim 22 further comprising:
a client process executed by the processor from the memory to cause the processor to receive the binary instance document and to recreate the transformed instance document from the binary instance document.

26. A computerized method of presenting multimedia content on a client in a specific application domain comprising:

receiving, by the client, a binary instance document; and

recreating, by the client, a transformed instance document from the binary instance document, wherein the transformed instance document encodes the descriptions of multimedia content in the specific application domain as a result of transforming an instance document that encodes the descriptions of multimedia content in a general application domain.

27. A computer-readable medium having executable instructions to cause a computer to perform operations comprising:

receiving a binary instance document; and

recreating a transformed instance document from the binary instance document, wherein the transformed instance document encodes descriptions of multimedia content in a specific application domain as a result of transforming an instance document that encodes the descriptions of multimedia content in a general application domain.

28. A system to present multimedia content on a client in a specific application domain comprising:

a processor coupled to a memory through a bus; and

a client process executed from the memory by the processor to cause the processor to receive a binary instance document and to recreate a transformed instance document from the binary instance document, wherein the transformed instance document encodes the descriptions of multimedia content in the specific application domain as a result of transforming an instance document that encodes the descriptions of multimedia content in a general application domain.